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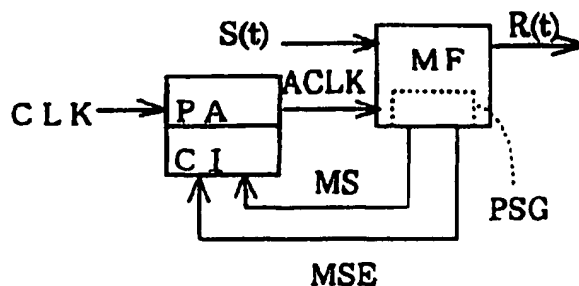
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(54) **Matched filter circuit**

(57) The present invention has an object to provide a matched filter circuit which is possible to synchronize a spreading code with an input signal. A matched filter according to the present invention samples input signal

in response to three clocks from the first to the third shifted by a half cycle of a sampling signal so as to judge whether the sampling clock is ahead or behind of the input signal according to signs of input signal sampled. One clock is selected to be the sampling clock.

**Fig. 1**





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# EUROPEAN SEARCH REPORT

Application Number  
EP 96 11 7432

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Y	US 4 789 996 A (BUTCHER JAMES S) 6 December 1988 (1988-12-06) * column 1, line 14 - line 20 * * column 1, line 41 - line 43 * * column 10, line 8 - line 9 * * column 10, line 13; figure 1 *	1-6	
Y	* figure 4A *	1,5,6	
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The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 16 October 2001	Examiner Giglietto, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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# EUROPEAN SEARCH REPORT

Application Number  
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Place of search <b>MUNICH</b>		Date of completion of the search <b>16 October 2001</b>	Examiner <b>Giglietto, M</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons Δ : member of the same patent family, corresponding document</p>			

EPD FORM 1503 03.02 (Prelim)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82